

EXHIBIT B

U.S. Patent No. US 11,468,984 v. Binah.ai

1. Claim Chart

Claim	Analysis
<p>[12.P] A method for calculating a current load level of a user of a mobile end unit, comprising:</p>	<p>Binah.ai (“Company”) performs and/or induces others to perform a method for calculating a current load level of a user of a mobile end unit.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company provides a Health Data Platform, an AI-based software solution that is installed on multiple devices such as smartphones (used herein as an exemplary product), tablets, and laptops (“mobile end unit”). Further, the software is used for calculating wellness score (“a current load level”) for the user.</p> <div style="border: 1px solid red; padding: 5px;"> <p>Binah.ai Health Data Platform</p> <p>Binah.ai’s Health Data Platform is an AI-powered, video-based, 100% software solution that enables anyone to measure a wide range of health and wellness indicators using a smartphone, tablet, or laptop.</p> </div> <p>For use cases where continuous monitoring is mandatory, Binah.ai offers support for continuous checks using a raw PPG signal that it receives from external PPG sensors.</p> <p>Delivered as Binah SDK (Software Development Kit), the software can be easily integrated into any app or workflow.</p> <p>Indicators Include: Blood pressure, heart rate, heart rate variability, oxygen saturation, breathing rate, sympathetic stress, parasympathetic activity, pulse-respiration quotient (PRQ), smoker detection, tuberculosis risk, Binah Wellness Score and fall detection. Groundbreaking bloodless blood tests*: Hemoglobin, and hemoglobin A1C (*under research). Additional blood tests coming soon.</p> <p>Source: https://www.binah.ai/</p>

Key Indicators You Can Measure with Binah.ai



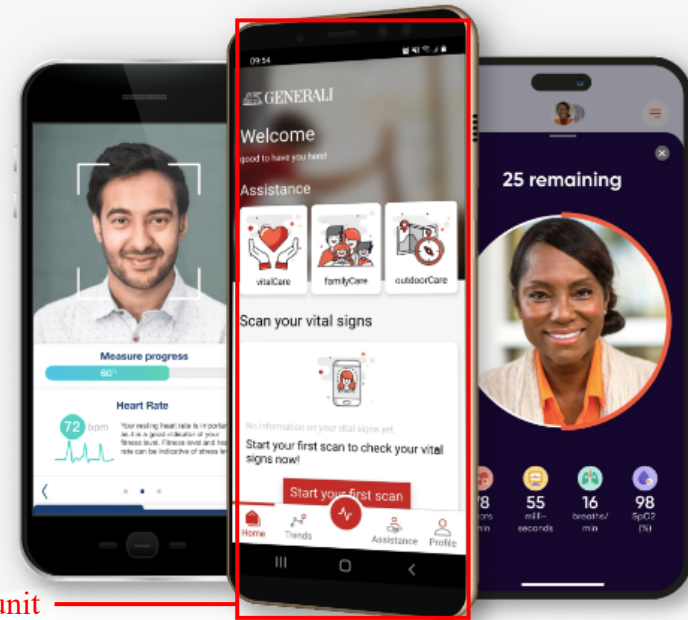
 Blood Pressure	 Heart Rate	 Heart Rate Variability
 Breathing Rate	 Oxygen Saturation	 Sympathetic Stress
 Parasympathetic Activity	 Pulse Respiratory Quotient (PRQ)	 Wellness Score
 Tuberculosis Risk	 Smoker Detection	 Fall Detection
 Hemoglobin*	 Hemoglobin A1c*	 Additional Indicators Coming Soon

Source: <https://www.binah.ai/> (annotated)

A current load level

Power Your Business Offering with Our Easy-to-Integrate SDK

Binah.ai's Health Data Platform is delivered as a Software Development Kit (SDK) developed for a wide range of devices and operating systems. Easily integrate our technology into your own app or web application to enhance your business offering with accelerated time to value.



Mobile end unit

Source: <https://www.binah.ai/sdk/> (annotated)

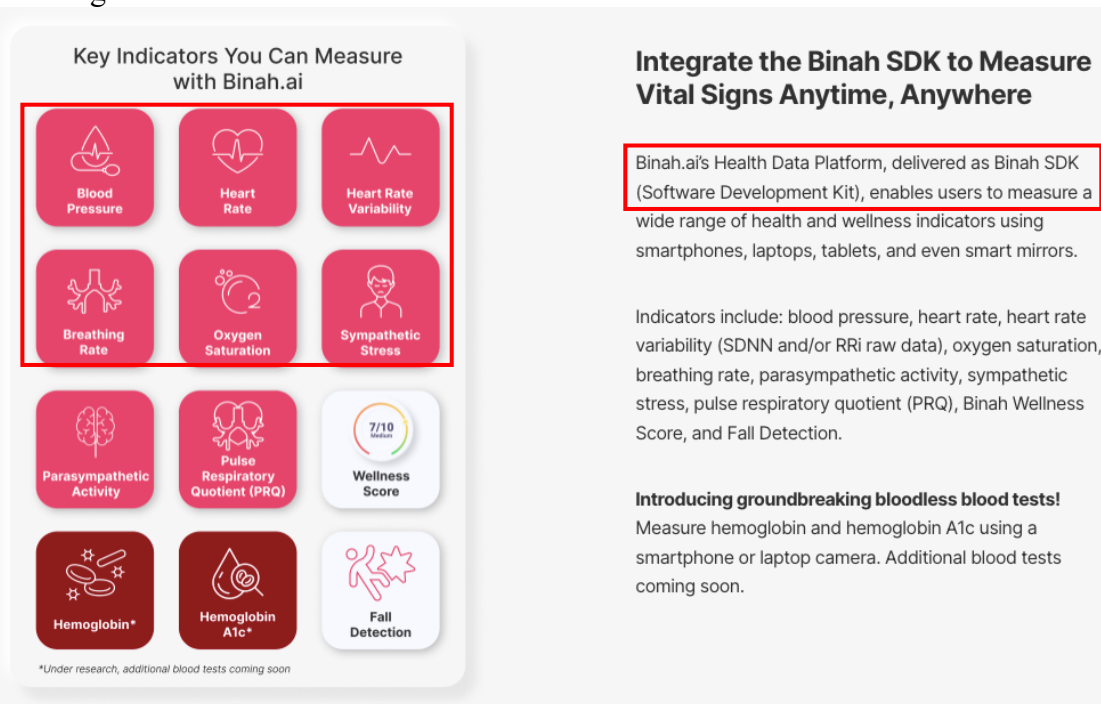
Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

[12.1] starting a further application installed on the mobile end unit so that this is carried out on the mobile end unit,

Company performs and/or induces others to perform the step of starting a further application installed on the mobile end unit so that this is carried out on the mobile end unit.

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

For example, Company's Health Data Platform ("further application") installed in a user's smartphone calculates multiple health-related metrics including, but not limited to, blood pressure, heart rate, heart rate variability, stress, and breathing rate.



further application

Source: <https://www.binah.ai/sdk/> (annotated)

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

<p>[12.2] calculating biometric data of the user by means of the further application, wherein the biometric data is recorded at least from user data that is recorded from using a plurality of applications present and available on the mobile end unit by the user, and calculated from at least one signal data produced by at least one sensor integrated into the</p>	<p>Company performs and/or induces others to perform the step of calculating biometric data of the user by means of the further application, wherein the biometric data is recorded at least from user data that is recorded from using a plurality of applications present and available on the mobile end unit by the user, and calculated from at least one signal data produced by at least one sensor integrated into the mobile end unit.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the Health Data Platform (“the further application”) measures the health-related metrics for the user, including but not limited to, blood pressure, heart rate, HRV, breathing rate, stress, and oxygen saturation (“biometric data of the user”). Further, the Health Data Platform utilizes the smartphone’s camera application (“plurality of applications present and available on the mobile end unit”) to scan the user’s face and analyze the facial features (“user data”) using AI and deep learning models. Furthermore, the platform analyzes an rPPG signal (“at least one signal data”) extracted from the video-based, contactless spot checks on the surface of the user’s face, that are generated via the smartphone’s camera sensor (“at least one sensor integrated into the mobile end unit”).</p> <p>Binah.ai offers businesses a software-only Health Data Platform that enables spot and continuous health and wellness checks anytime, anywhere, utilizing cameras on smartphones, tablets, laptops, as well as sensors</p> <p>Source: https://binah.ai/ (annotated) plurality of applications</p> <p>Binah.ai uses a unique mix of advanced AI and deep learning algorithms to enable spot checks from camera-based devices like smartphones, and continuous checks from PPG sensors. For spot checks, Binah.ai extracts and analyzes an rPPG signal taken from exposed skin on the surface of a human face. For continuous checks, Binah.ai analyzes a PPG signal delivered from the sensor via Bluetooth to calculate measurement results. Delivering consistent results in under one minute, Binah.ai’s technology is agnostic to skin color and gender. Binah.ai’s five stress levels are calculated based on the Baevsky Stress Index.</p> <p>Source: https://www.binah.ai/</p>
---	---

mobile end
unit,

How Our Technology Works

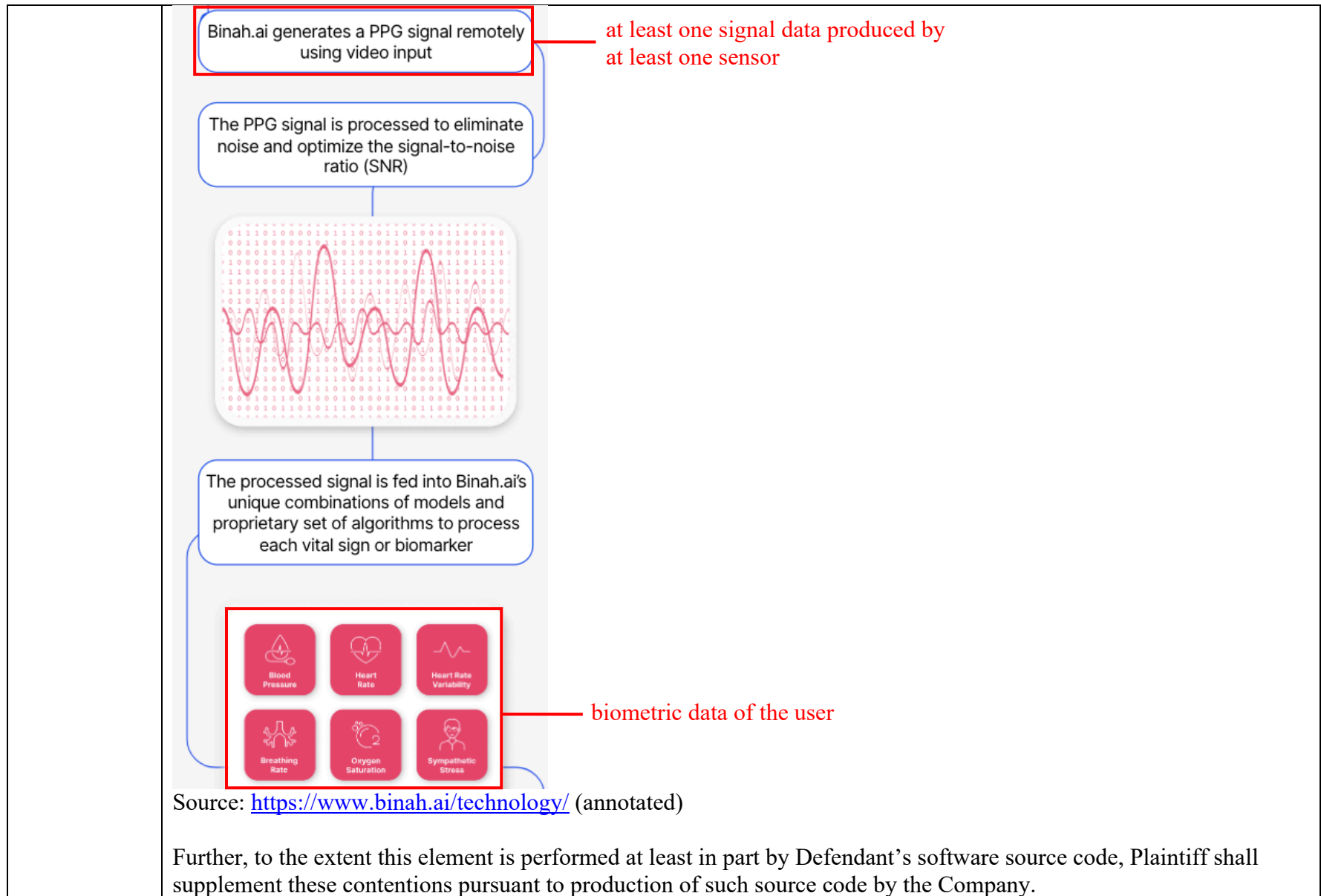
Binah.ai's software-based technology employs advanced AI and deep learning algorithms to extract various health measurements using Photoplethysmography (PPG) within 20-60 seconds. Our technology combines computer vision, signal processing, and machine learning techniques to extract and analyze PPG signals and deliver vital signs and biomarker measurements. Delivered as a Software Development Kit (Binah SDK), the technology supports contactless spot checks through camera-based devices like smartphones and tablets, and continuous checks through contact-based PPG sensors.

Source: <https://www.binah.ai/technology/>

Video-Based, Contactless Spot Checks using rPPG

The end user takes a 35-60 second
selfie, while the following steps occur:

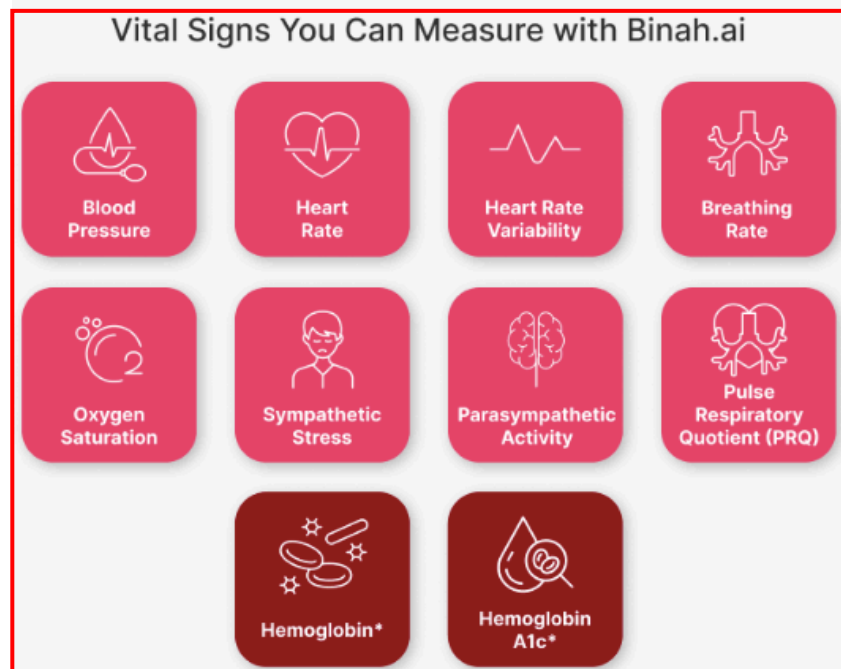
Source: <https://www.binah.ai/technology/>



<p>[12.3] wherein the biometric data from the at least one signal data is produced by said at least one sensor, and user data of said plurality of available applications, is divided into a plurality of categories,</p>	<p>Company performs and/or induces others to perform the step wherein the biometric data from the at least one signal data is produced by said at least one sensor, and user data of said plurality of available applications, is divided into a plurality of categories.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the Health Data Platform measures multiple health-related metrics for the user, including, but not limited to, Heart rate, Breathing rate, HRV, Blood Pressure, Stress, Pulse Respiratory Quotient (PRQ), and Oxygen Saturation (“plurality of categories”).</p> <div style="border: 1px solid red; padding: 2px;"> <p>Binah.ai Health Data Platform</p> </div> <p>Binah.ai’s Health Data Platform is an AI-powered, video-based, 100% software solution that enables anyone to measure a wide range of health and wellness indicators using a smartphone, tablet, or laptop.</p> <p>For use cases where continuous monitoring is mandatory, Binah.ai offers support for continuous checks using a raw PPG signal that it receives from external PPG sensors.</p> <p>Delivered as Binah SDK (Software Development Kit), the software can be easily integrated into any app or workflow.</p> <div style="border: 1px solid red; padding: 2px;"> <p>Indicators Include: Blood pressure, heart rate, heart rate variability, oxygen saturation, breathing rate, sympathetic stress, parasympathetic activity, pulse-respiration quotient (PRQ), smoker detection, tuberculosis risk, Binah Wellness Score, and fall detection. Groundbreaking bloodless blood tests*: Hemoglobin, and hemoglobin A1C (*under research). Additional blood tests coming soon.</p> </div> <p style="color: red; margin-left: 400px;">Plurality of categories</p> <p>Source: https://www.binah.ai/ (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p>
---	---

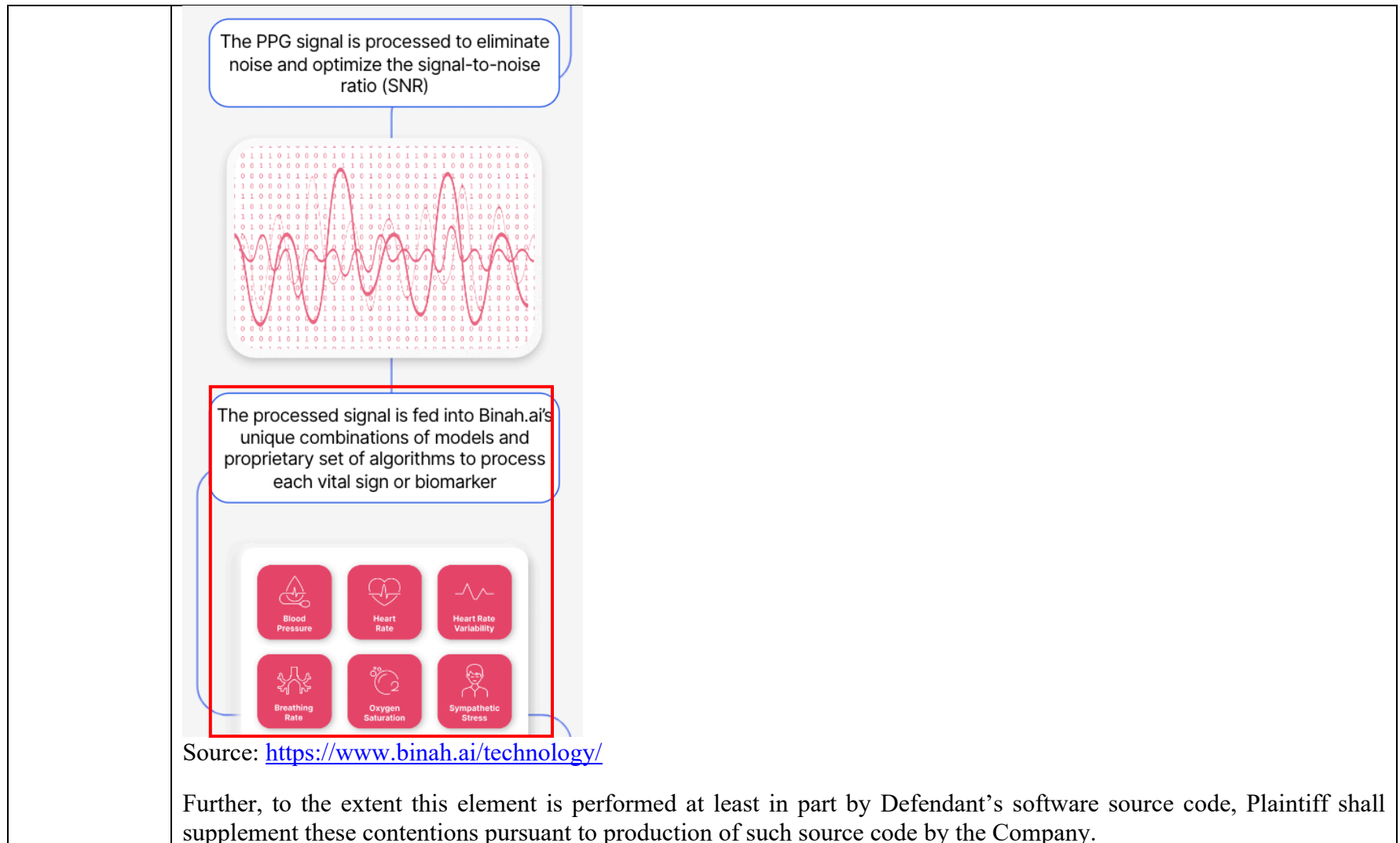
<p>[12.4] evaluating the biometric data with an evaluation unit provided in the mobile end unit or in a central server for determining the current load level,</p>	<p>Company performs and/or induces others to perform the step of evaluating the biometric data with an evaluation unit provided in the mobile end unit or in a central server for determining the current load level.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the Health Data platform calculates the wellness score (“the current load level”) of the user, based on the measured health-related metrics or vital signs for the user, including, but not limited to, heart rate, blood pressure, HRV, stress, and Oxygen saturation (“biometric data”). Further, the platform utilizes a unique combination of models and a set of algorithms to calculate the wellness score, therefore, it would be apparent to a person having ordinary skill in the art that the platform comprises an evaluation unit, installed in the user’s smartphone to determine the wellness score of the user.</p> <div style="border: 1px solid red; padding: 5px;"> <p>Binah Wellness Score is a risk score that might predict the cardiovascular risk of individuals. Insurance and wellness providers</p> </div> <p>can empower their clients to know their risks, enable clients to improve their lifestyles and track their own progress, and use the insights gained from the wellness score to provide personalized suggestions and rewards.</p> <p>Source: https://www.binah.ai/wellness-score/</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p>How it’s Calculated</p> </div> <div style="border: 1px solid red; padding: 5px;"> <p>The Binah Wellness Score is calculated based on vital signs measured by Binah’s technology. It is designed to be measured on a</p> </div> <p>consistent basis under similar conditions so that users can monitor their numbers and trends over time.</p> <p>Source: https://www.binah.ai/wellness-score/ (annotated)</p>
--	---

evaluating the biometric data for determining the current load level



The biometric data

Source: <https://www.binah.ai/vital-signs/> (annotated)

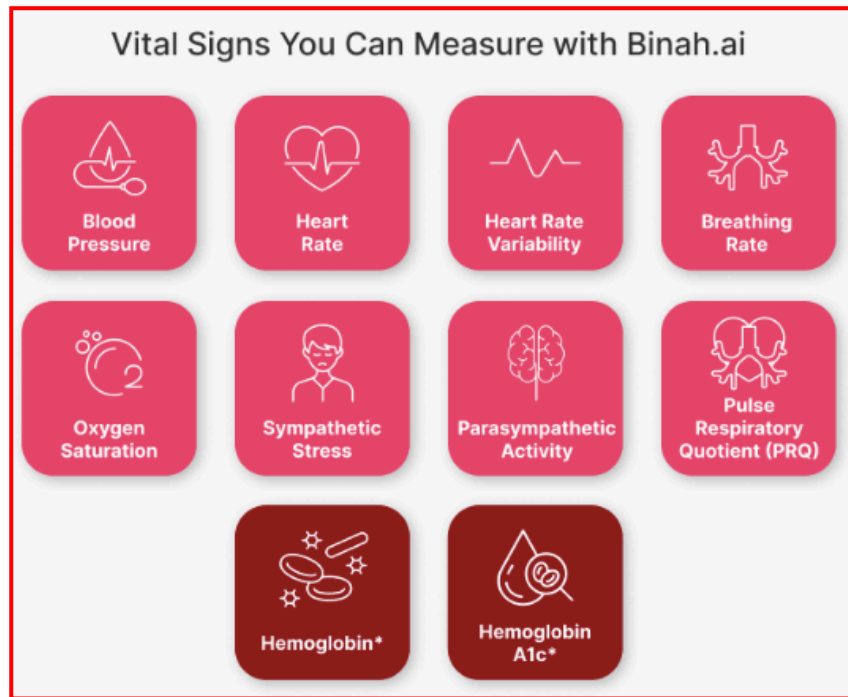


[12.5] wherein: category-specific load levels are ascertained by means of an arithmetic mean or a weighted mean of features relating to the biometric data pertaining to each category in the plurality of categories,

Company performs and/or induces others to perform the step wherein category-specific load levels are ascertained by means of an arithmetic mean or a weighted mean of features relating to the biometric data pertaining to each category in the plurality of categories.

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

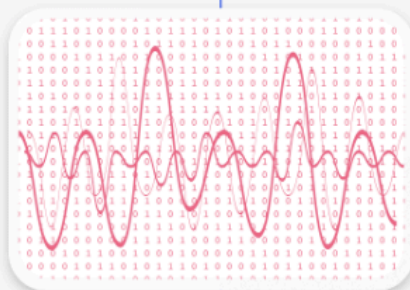
For example, the Health Data Platform analyzes the rPPG signal extracted from the video-based, contactless spot checks on the surface of the user's face, to measure the health-related metrics of the user, including, but not limited to, blood pressure, heart rate, heart rate variability, sympathetic stress, pulse respiratory quotient, Hemoglobin, and breathing rate ("category-specific load levels"). Further, the Health data platform utilizes a unique combination of AI models and a set of deep learning algorithms to measure the health-related metrics of the user. Therefore, upon information and belief, the health – related metrics of the user are ascertained by means of an arithmetic mean or a weighted mean of features relating to the biometric data pertaining to each category in the plurality of categories.



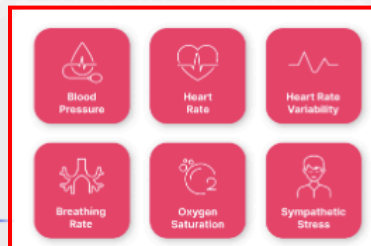
Source: <https://www.binah.ai/vital-signs/>

Binah.ai generates a PPG signal remotely using video input

The PPG signal is processed to eliminate noise and optimize the signal-to-noise ratio (SNR)



The processed signal is fed into Binah.ai's unique combinations of models and proprietary set of algorithms to process each vital sign or biomarker



Category-specific load levels

Source: <https://www.binah.ai/technology/> (annotated)

How Our Technology Works

Binah.ai's software-based technology employs advanced AI and deep learning algorithms to extract various health measurements using Photoplethysmography (PPG) within 20-60 seconds. Our technology combines computer vision, signal processing, and machine learning techniques to extract and analyze PPG signals and deliver vital signs and biomarker measurements. Delivered as a Software Development Kit (Binah SDK), the technology supports contactless spot checks through camera-based devices like smartphones and tablets, and continuous checks through contact-based PPG sensors.

Source: <https://www.binah.ai/technology/>

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

[12.6]
the evaluation
unit
determines
the current
load level
with the aid
of a network
of artificial
neural
networks,

the network
of artificial
neural
networks
comprises a
plurality of
artificial

Company performs and induces others to perform the step wherein the evaluation unit determines the current load level with the aid of a network of artificial neural networks, the network of artificial neural networks comprises a plurality of artificial neural networks that interact with each other, the plurality of artificial neural networks calculates in parallel with a plurality of processors.

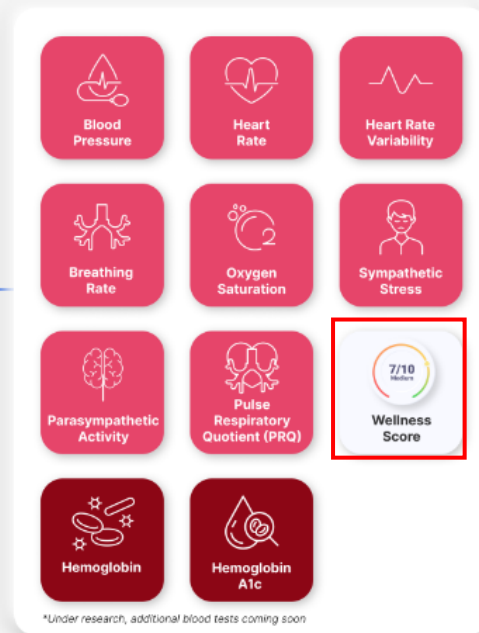
This element is infringed literally, or in the alternative, under the doctrine of equivalents.

For example, the Health Data platform calculates the wellness score of the user based on the measured health-related metrics of the user, by utilizing the unique combination of models and set of deep learning algorithms. Therefore, it would be apparent to a person having ordinary skill in the art that a network of artificial neural networks that includes a plurality of artificial neural networks interacting with each other, is used to calculate the wellness score ("the current load level") for the user. Since the health data platform uses the AI and deep learning algorithms to measure the health-related metrics of the user, upon information and belief, the user's smartphone comprises a plurality of processors, that support the plurality of artificial neural networks.

neural networks that interact with each other,

the plurality of artificial neural networks calculates in parallel with a plurality of processors,

The processed signal is fed into Binah.ai's unique combinations of models and proprietary set of algorithms to process each vital sign or biomarker

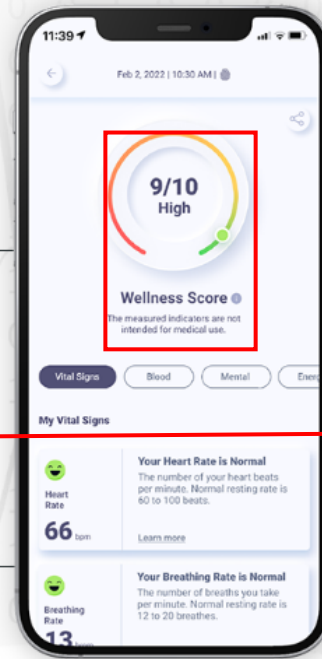


Source: <https://www.binah.ai/technology/>

Unique Technology Mix

Artificial Intelligence Technologies

Proprietary Set of Algorithms



Signal Processing

the plurality of artificial neural networks calculates in parallel with a plurality of processors

Source: <https://www.binah.ai/technology/> (annotated)

How Our Technology Works

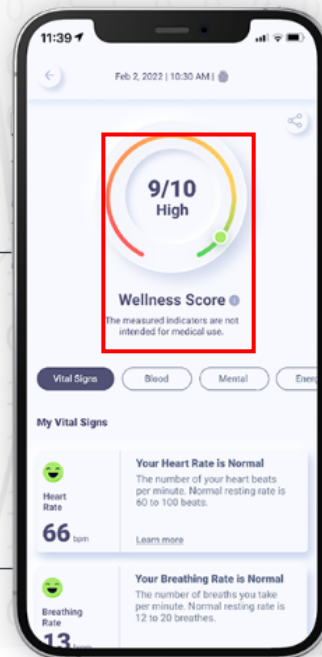
Binah.ai's software-based technology employs advanced AI and deep learning algorithms to extract various health measurements using Photoplethysmography (PPG) within 20-60 seconds. Our technology combines computer vision, signal processing, and machine learning techniques to extract and analyze PPG signals and deliver vital signs and biomarker measurements. Delivered as a Software Development Kit (Binah SDK), the technology supports contactless spot checks through camera-based devices like smartphones and tablets, and continuous checks through contact-based PPG sensors.

	<p>Source: https://www.binah.ai/technology/</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p>
<p>[12.7] the plurality of processors is arranged on the mobile end unit or on the central server,</p>	<p>Company performs and induces others to perform the step wherein the plurality of processors is arranged on the mobile end unit or on the central server.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the health data platform uses AI and deep learning algorithms to calculate various health-related metrics and the wellness score of the user. Since the health data platform uses a set of algorithms, upon information and belief, the platform utilizes the plurality of processors present in the user's smartphone.</p>

Unique Technology Mix

Artificial Intelligence
Technologies

Proprietary
Set of
Algorithms



Signal
Processing

Source: <https://www.binah.ai/technology/>

Binah.ai Health Data Platform

Binah.ai's Health Data Platform is an AI-powered, video-based, 100% software solution that enables anyone to measure a wide range of health and wellness indicators using a smartphone, tablet, or laptop.

For use cases where continuous monitoring is mandatory, Binah.ai offers support for continuous checks using a raw PPG signal that it receives from external PPG sensors.

Delivered as Binah SDK (Software Development Kit), the software can be easily integrated into any app or workflow.

Indicators Include:

Blood pressure, heart rate, heart rate variability, oxygen saturation, breathing rate, sympathetic stress, parasympathetic activity, pulse-respiration quotient (PRQ), smoker detection, tuberculosis risk, Binah Wellness Score, and fall detection. Groundbreaking bloodless blood tests*: Hemoglobin, and hemoglobin A1C (*under research). Additional blood tests coming soon.

Source: <https://www.binah.ai/>

How Our Technology Works

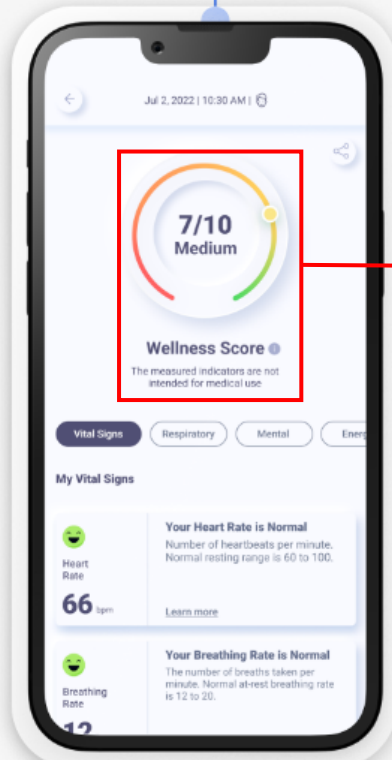
Binah.ai's software-based technology employs advanced AI and deep learning algorithms to extract various health measurements using Photoplethysmography (PPG) within 20-60 seconds. Our technology combines computer vision, signal processing, and machine learning techniques to extract and analyze PPG signals and deliver vital signs and biomarker measurements. Delivered as a Software Development Kit (Binah SDK), the technology supports contactless spot checks through camera-based devices like smartphones and tablets, and continuous checks through contact-based PPG sensors.

Source: <https://www.binah.ai/technology/>

	Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.
<p>[12.8] at least one graphics card processor of at least one graphics card supports the calculation of the artificial neural networks,</p> <p>wherein the at least one graphics card with the at least one graphics card processor is arranged on the mobile end unit or on the central server, and</p>	<p>Company performs and induces others to perform the step wherein at least one graphics card processor of at least one graphics card supports the calculation of the artificial neural networks, wherein the at least one graphics card with the at least one graphics card processor is arranged on the mobile end unit or on the central server.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the health data platform utilizes AI and deep learning algorithms to measure and display various health-related metrics of the user, including, but not limited to heart rate, blood pressure, and breathing rate. Further, based on the measured health-related metrics of the user, the health data platform calculates the wellness score of the user. Therefore, upon information and belief, the user's smartphone comprises at least one graphics card processor of at least one graphics card that supports the calculation of the artificial neural networks.</p> <p>Binah.ai Health Data Platform</p> <p>Binah.ai's Health Data Platform is an AI-powered, video-based, 100% software solution that enables anyone to measure a wide range of health and wellness indicators using a smartphone, tablet, or laptop.</p> <p>For use cases where continuous monitoring is mandatory, Binah.ai offers support for continuous checks using a raw PPG signal that it receives from external PPG sensors.</p> <p>Delivered as Binah SDK (Software Development Kit), the software can be easily integrated into any app or workflow.</p> <p>Indicators Include: Blood pressure, heart rate, heart rate variability, oxygen saturation, breathing rate, sympathetic stress, parasympathetic activity, pulse-respiration quotient (PRQ), smoker detection, tuberculosis risk, Binah Wellness Score, and fall detection. Groundbreaking bloodless blood tests*: Hemoglobin, and hemoglobin A1C (*under research). Additional blood tests coming soon.</p>

	<p>Source: https://www.binah.ai/</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p>
<p>[12.9] wherein the determined current load level of the user is displayed to the user via the mobile end unit in the form of a consolidated load level obtained from a combination of category-specific load levels by forming the arithmetic mean or weighted mean of the category-specific load levels.</p>	<p>Company performs and induces others to perform the step wherein the determined current load level of the user is displayed to the user via the mobile end unit in the form of a consolidated load level obtained from a combination of category-specific load levels by forming the arithmetic mean or weighted mean of the category-specific load levels.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the health data platform installed in the user's smartphone displays ("displayed to the user via the mobile end unit") the wellness score ("the determined current load level of the user in the form of a consolidated load level") for the user that is calculated based on the measured vital signs of the user, including, but not limited to, heart rate, breathing rate, and oxygen saturation ("a consolidated load level obtained from a combination of category-specific load levels by forming the arithmetic mean or weighted mean of the category-specific load levels").</p>

The final results are displayed on an end user's device. Binah.ai has no access to the data or results



the determined current load level of the user is displayed to the user via the mobile end unit

Source: <https://www.binah.ai/technology/> (annotated)

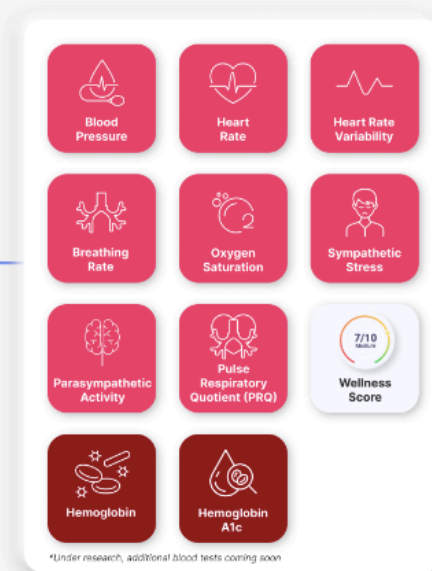
How it's Calculated

The Binah Wellness Score is calculated based on vital signs measured by Binah's technology. It is designed to be measured on a consistent basis under similar conditions so that users can monitor their numbers and trends over time.

Source: <https://www.binah.ai/wellness-score/> (annotated)

a consolidated load level obtained from a combination of category-specific load levels by forming the arithmetic mean or weighted mean of the category-specific load levels

The processed signal is fed into Binah.ai's unique combinations of models and proprietary set of algorithms to process each vital sign or biomarker



The final results are displayed on on end user's device. Binah.ai has no access to the data or results

Source: <https://www.binah.ai/technology/>

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

2. List of References

1. <https://www.binah.ai/>, last accessed on 19 June, 2024.
2. <https://www.binah.ai/sdk/>, last accessed on 19 June, 2024.
3. <https://www.binah.ai/technology/>, last accessed on 19 June, 2024.
4. <https://www.binah.ai/wellness-score/>, last accessed on 19 June, 2024.
5. <https://www.binah.ai/vital-signs/>, last accessed on 19 June, 2024.